

PROCEEDINGS
OF THE
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THE FLORIDA DEER.

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It has been known for many years that the Florida deer differed enormously in size from its more northern representative, and while most writers on the subject have mentioned this, no one has as yet separated the two. Until recently there has been a great lack of museum specimens of our larger mammals, and this fact alone can account for the Florida deer's remaining so long unnamed.

The Florida deer is little more than half the size of the deer of the northeastern United States, and, in addition to this, there are such other differences as decide me to give it full specific rank. The color of the Florida deer at all seasons is rather darker than that of *Cariacus americanus* (Erxleben),* and unlike the latter,

*The name *Cervus virginianus* Boddaert is so well known and has stood for our eastern deer so long that it seems like sacrilege to change it, but it is antedated by seven years by Erxleben's name *Cervus dama americana*. Erxleben proposed this name on page 312 of his *Syst. Regni Animalis, Mammalia*, 1777. In a separate paragraph at the end of his article on *Cervus dama* he asks if *americanus* is different, as supposed by Pennant (*Differtne vere americanus vti Pennanto videtur?*). He quotes a part of Pennant's description and gives synonymy, so that the name will have to stand. He gives its distribution as Virginia and Carolina.

Mr. Oldfield Thomas (in *Ann. and Mag. of Nat. Hist.* (6), xv, p. 193, Feb., 1895) points out that Gloger's generic name *Dorcelaphus* equals and antedates by one year Lesson's name *Cariacus*, but as *Dorcelaphus* is undoubtedly also antedated by other names, it seems wiser to keep the well-known name *Cariacus* until this point is definitely settled.

it undergoes no decided change in pelage between winter and summer. The hair is about the same color, consistency, and length throughout the year, with only the change due to actual wearing and fading. Apart from size there are some very decided cranial and dental characters which separate the two species. The most striking of these is the shape and size of the nasal and maxillary bones and the very large molar and premolar teeth of the Florida animal.

In the years 1893 and 1894 Mr. F. L. Small collected in Citrus county, Florida, five fine specimens of the Florida deer. These are now in the collection of E. A. and O. Bangs, and, with two superb deer lately sent me by Mr. Alvah G. Dorr from Bucksport, Maine, have served in defining the Florida species. Incidentally I have examined a large number of skulls and skins from various localities in the northeast. In comparing deer from Florida and Maine we have, of course, the extreme of differentiation in the east, but, as far as I have been able to ascertain, the deer of Virginia and Carolina does not differ essentially from that of Maine.

The Florida deer may be described as follows:

***Cariacus osceola* sp. nov.**

Type No. 2394, coll. of E. A. and O. Bangs, female, young adult (2 to 3 years old) from Citronelle, Citrus county, Florida, coll. by F. L. Small, December 29, 1893. Original No. 1107.

General characters.—Size small; general color dark; hair short and fine at all seasons.

Color (of type specimen in fresh autumnal pelage).—Upper parts of back, neck, and head a mixed dark and light brown, each hair banded, dark brown at the tip, then yellowish brown, then dark brown and Isabella color at the base. The dark brown color predominates in a narrow median band along the back and is most intense on the neck and between the ears. On the flanks and along the sides the hairs are not banded, but are Isabella color at base and cinnamon at tips; sides and under surface of neck cinnamon; throat, belly, inside of legs, and arms white; ears sparsely haired; upper surface dark brown, many of the hairs tipped with yellow; inside surface white; the hairs of the upper side of tail are dark-red brown at base and cinnamon at tips; under side of the tail white, the hairs very long; eyelashes jet black.

An old male topotype (No. 2392, July 17, 1894), in worn midsummer coat, has lost the banding of the hairs and is a bright russet cinnamon above, which extends to the front of the eyes. The muzzle is very sparsely haired, and of a grizzled hair brown color, with a black spot

behind each nostral. The tail is broadly edged with black at the base and black above, at the tip.

An old male from Blitches Ferry, Citrus county, Florida (No. 2391, October 24, 1894) in fresh autumnal pelage is very dark above, the lower dark band of the hairs extending to their base and imparting to the whole upper parts a rich dark-brown color, variegated by the yellow bands of some of the hairs; tail not edged with black, but like that of the type.

A half-grown female topotype (No. 2395, August 9, 1894) has the hairs of the back unbanded and is clay color above, beautifully marked with small irregular white spots.

Size.—The only specimen measured in the flesh (No. 2391, male, old adult, from Blitches Ferry, Citrus county, Florida) afforded the following: Total length, 1,600; tail vertebræ, 280; hind foot, 500 (measured by the collector, F. L. Small).

The skull.—The skull of *Cariacus osceola* is very small; it is different in general shape from that of *C. americanus*, being much narrower and proportionally longer; the zygomatic arch lies much closer to the skull, and thus heightens its slender appearance; the nasal bones are long and slender, being about the length and about half the width of those of *C. americanus*; the whole rostral portion is slender. In *C. osceola* the nasal and premaxillary bones meet. In *C. americanus* the nasal and premaxillary are separated by a forward arm of the maxillary. (This arm of the maxillary varies somewhat in width, but is present in every skull of *C. americanus* I have examined, young and adult, while in every skull of *C. osceola*, both young and adult, that I have seen it is altogether absent.)

The teeth.—The molar and premolar teeth of *C. osceola* differ enormously in size from those of *C. americanus*. Every tooth is actually larger than the corresponding tooth in *americanus*, and the tooth row consequently longer.

The antlers.—The antlers of the male *C. osceola* apparently never attain a great size. No. 2391, which is a very old deer with four prongs, only measures 413 millimeters across the greatest stretch of his antlers, and the antlers themselves are small and light. *C. americanus* No. 4999, from Bucksport, Maine, is about the same age as No. 2391 and has also four prongs; they are much larger and heavier and measure across the greatest stretch 636 millimeters.

The Florida deer is of very general distribution over the whole of peninsular Florida, but in the more thickly settled and accessible parts of the State it has been much reduced in numbers of late. Its northern range is unknown to me, and I am therefore unable to state whether or not it overlaps the range of *C. americanus*.

Cranial Measurements of *Cariacus americanus* (Erxl.) and *Cariacus osceola* Bangs.

Number.	Sex and age.	Locality.	Basilar length (basion to front of premaxillary).	Occipito-nasal length.	Zygomatic breadth across middle of orbits.	Mastoid breadth.	Least interorbital breadth.	Greatest length of nasals.	Least breadth of nasals.	Length of upper tooth row on alveoli.	Greatest length of single half of mandible.	Length of lower tooth row on alveoli.
C. americanus.												
4999	♂ old ad.	Maine, Bucksport.....	296.0	259.5	136.0	109.0	82.0	96.0	26.0	79.5	240.5	82.0
5000	♀ old ad.	“ “	259.0	231.0	121.5	90.0	72.0	90.0	24.0	66.5	221.0	73.5
C. osceola.												
2391	♂ old ad.	Florida, Blitches Ferry, Citrus county.	254.5	229.5	113.0	91.0	70.0	87.5	17.5	76.0	216.0	78.0
2392	♂ old ad.	Florida, Citronelle, Citrus county.	263.0	241.0	114.5	94.0	67.0	93.0	18.0	77.0	229.5	84.0
2394	♀ ad.....	Florida, Citronelle, Citrus county.	220.0	202.0	91.0	70.5	51.5	83.0	14.0	73.0	194.5	80.0
2393	♀ ad.....	Florida, Citronelle, Citrus county.	211.0	197.5	94.5	69.0	59.9	80.0	15.5	72.5	189.0	82.0